

Comparative Study on Changes of Subjective Well-beings in Two contrastive money-games; Emotions and Impacts by Profit-oriented or Appreciation-oriented motives

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Purpose and Background: this study is to propose a model of workshop which makes participants think and feel two contrastive views on money and economy, and to evaluate quantitatively how their subjective well-being changes before and after the workshop. This study focused on the correlations between human behaviors and well-beings under norms of money, trades, economic incentives and ethics (North 1994, Sandel 2012) rather than conventional studies on correlations of income and individual well-being (Diener and Biswas-Diener 2002, Oishi, Diener and Lucas 2007, Kahneman 2010). The authors designed this money-game (Faria and Willington 2004) workshop for participants to provide a co-creative (Vargo and Lusch 2008, Rawaswamy and Gouillart 2010) opportunity of group learning (Kolb 1984, Fleming 1997, Will 1997, Theeboom et al. 2014) to observe these different views on money-related norms, the *profit maximizing* norm (Clark 1973, Samuelson and Marks 2003) and the *appreciations maximizing* norm (Mauss 1924, Eisenstein 2011) that may change contrastively peoples' behaviors in markets and influence their subjective well-beings.

Design of Workshop: a group-leaning workshop is composed by two money-game sessions evenly divided as time: one is for *profit maximizing* that an administrator instructs participants use their money and behaved for profit maximizing; another is for *appreciations maximizing* that an administrator instructs participants use their money and behaved for maximizing their appreciations. All resources distributed to participants and rules applied to the games are set equal among two sessions except for these contrastive principles about market behaviors. In either session, participants are divided to 4-8 stores having their own parts of an ornament and money. Each stores trade money to gather 2-4 other different parts, depending on the number of participants, for assembling and selling them to an administrator. These two trading sessions represent two different norms on money in our civilizations (Scharmer and Kaufer 2013, Martin 2013); the *profit maximizing* session (ProfitMAX) and the *appreciations maximizing* session (ThanksMAX).

Evaluation: the authors implemented 14 workshops in Japan from January 2016 to June 2017; 4 workshops held in Tokyo area, 6 workshops held in non-Tokyo area and 4 workshops in religious facilities, since those attributions of residency and religious/secular environments are deemed differently affecting residents' motives on money (Wernimont and Fitzpatrick 1972, O'Brien and Steve 1987, Prime 1993). They measured quantitatively participants' changes in subjective well-beings before and after ProfitMAX, ThanksMAX and the entire workshop by four factors of happiness (4HFs: Maeno and Maeno 2015), the satisfaction with life scale (SWLS: Diener et al. 1985) and Japanese version of PANAS (JPANAS: Sato and Yasuda 2001).

Table 1. Changes in participants' subjective well-being: comparisons between *ex ante* and *ex post* of sessions

		ProfitMAX (P)	ThanksMAX (T)	Entire WS (P+T)	Note
Urban (4)	4HFs	H:4 U:8	H:13 U:0	H:6 U:1	The number of indicators statistically significant of 10% or under. H: Change for happier with significance U: Change for unhappier with significance
	SWLS	H:1 U:0	H:2 U:0	H:4 U:0	
	JPANAS-P	H:4 U:0	H:0 U:2	H:4 U:0	
	JPANAS-N	H:1 U:1	H:0 U:4	H:4 U:0	
Rural (6)	4HFs	H:1 U:2	H:6 U:0	H:2 U:0	<Key results > JPANAS-P increased in most sessions of ProfitMAXs and entire WSs. JPANAS-N decreased in most session of ThanksMAXs and entire WSs. 4HFs increased in most Urban sessions.
	SWLS	H:1 U:0	H:1 U:0	H:3 U:0	
	JPANAS-P	H:5 U:0	H:1 U:1	H:3 U:0	
	JPANAS-N	H:1 U:2	H:4 U:0	H:1 U:0	
Religious (4)	4HFs	H:4 U:4	H:7 U:1	H:4 U:1	
	SWLS	H:1 U:1	H:3 U:0	H:3 U:0	
	JPANAS-P	H:2 U:0	H:1 U:1	H:4 U:1	
	JPANAS-N	H:0 U:2	H:0 U:3	H:2 U:1	

Conclusion: this study successfully constructed the model of workshop which makes participants think and feel two contrastive views on money, and it evaluated quantitatively how workshop positively affected changes in participants' well-beings.